

REMARKS

No claims have been cancelled, added, or amended. Therefore, claims 1-24 are currently pending in the application. In view of the following remarks, Applicants respectfully request withdrawal of the rejections and forwarding of the application on to issuance.

Claim Objections

The Office has advised that should claim 3 be found allowable, claim 4 will be objected to under 37 C.F.R § 1.75 as being a substantial duplicate thereof. Claims 3 and 4, along with 37 C.F.R §1.75(b), are reproduced below for the Examiner's convenience:

3. An optical recording medium in accordance with Claim 1, wherein the second dielectric film is formed of a mixture of ZnS and SiO₂.

4. An optical recording medium in accordance with Claim 1, wherein the at least one information recording layer is constituted by a first recording film containing one element selected from the group consisting of Si, Ge, Sn, Mg, In, Zn, Bi and Al as a primary component and a second recording film provided in the vicinity of the first recording film and containing one element selected from the group consisting of Cu, Al, Zn, Ti and Ag and different from the element contained in the first recording film as a primary component and when the laser beam is projected, the element contained in the first recording film as a primary component and the element contained in the second recording film as a primary component are mixed with each other, thereby forming a record mark.

§ 1.75 Claim(s).

(b) More than one claim may be presented provided they differ substantially from each other and are not unduly multiplied.

Clearly, claims 3 and 4 differ substantially. Perhaps the Office meant to object to claim 4 as being a substantial duplicate of claim 5. In order to further prosecution, Applicants will address the potential objection of claim 4. Claim 5, along with relevant portions of MPEP 706.03(k), is reproduced below:

5. An optical recording medium in accordance with Claim 2, wherein the at least one information recording layer is constituted by a

first recording film containing one element selected from the group consisting of Si, Ge, Sn, Mg, In, Zn, Bi and Al as a primary component and a second recording film provided in the vicinity of the first recording film and containing one element selected from the group consisting of Cu, Al, Zn, Ti and Ag and different from the element contained in the first recording film as a primary component and when the laser beam is projected, the element contained in the first recording film as a primary component and the element contained in the second recording film as a primary component are mixed with each other, thereby forming a record mark.

MPEP 706.03(k) Duplicate Claims

However, court decisions have confirmed applicant's right to restate (i.e., by plural claiming) the invention in a reasonable number of ways. Indeed, a mere difference in scope between claims has been held to be enough.

While the language of claims 4 and 5 are nearly identical, claim 4 is dependent on claim 1, while claim 5 is dependent on claim 2. Therefore, the claims have differing scope and are not substantial duplicates.

The § 103 Rejections

Claims 1-3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Uno et al '239 (hereinafter “Uno”).

Claims 1-3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shuy et al '160 (hereinafter “Shuy”) in view of Sakaue et al '587 (hereinafter “Sakaue”).

Claims 1-3 also stand rejected under 35 U.S.C. § 103(a) as being unpatentable over various combinations that include Sakaue or Uno above and at least one of the following references: Aoshima et al '551, Mishima et al '452, Aoshima et al '351, Mishima et al '577, Aoshima et al '973, and Inoue et al '080 (misabeled as “Mishima et al. '080” on page 6, paragraph 10, of the present Office Action).

Claims 1-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sakaue or Uno above and least one of the following references: Inoue et al '194 and Inoue et al '932.

Claims 1-2, 4-5, 7-8, 10-11, 13-14, 16-17, 19-20, and 22-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Inoue et al. '907.

Applicants assert that none of the Aoshima et al '551, Mishima et al '452, Aoshima et al '351, Mishima et al '577, Aoshima et al '973, Inoue et al '080, Inoue et al '194, Inoue et al '932, and Inoue et al '907 references are valid prior art because each of them was filed in the U.S. *after* Applicants' foreign priority date of November 22, 2002. Therefore, because the rejection of at least some of claims 1-24 as listed above relies on at least one of the above-listed non-prior art references, Applicants respectfully request that the such rejections of claims 1-24, which use the non-prior art references as a basis for rejection, be withdrawn.

A certified English translation of the Japanese priority document will be filed in due course subsequent to the filing of this present amendment.

Double Patenting Rejections

Claims 1-24 are provisionally rejected on various grounds of nonstatutory obviousness-type double patenting based on several co-pending applications. Applicants acknowledge the provisional double patenting rejections. Applicants are prepared to file a terminal disclaimer should any one of the co-pending applications issue as a patent.

Claims 1-3

With regards to the rejections of claims 1-3 on the basis of Sakaue, Uno, and/or Shuy, **claim 1** recites an optical recording medium comprising a substrate, a protective layer and a plurality of information recording layers between the substrate and the protective layer. The optical recording medium is capable of recording data in the plurality of information recording layers and reproducing data recorded in the plurality of information recording layers by projecting a laser beam via a light incidence plane constituted by one of the surfaces of the substrate and protective layer onto the plurality of information recording layers. At least one information recording layer other than a farthest information recording layer from the light incidence plane among the plurality of information recording layers includes at least one recording film, a first dielectric film located on the side of the light incidence plane with respect

to the at least one recording film and containing an oxide as a primary component and added with nitrogen, and a second dielectric film located on the opposite side of the light incidence plane with respect to the at least one recording film and having a lower thermal conductivity than that of the first dielectric film.

In making out its rejection of claim 1, the Office argues that Applicants' claimed subject matter is rendered obvious by Uno and also by the combination of Shuy and Sakaue.

Uno discloses a multilayered optical recording media in its Figure 8. The Office equates Uno's interface layers 103, 105, 203, and 205 with Applicants' dielectric films. Thus, the Office appears to argue that Uno's interface layers 103 and 105 of first medium 101 would be equivalent to Applicants' first and second dielectric films, respectively, located in at least one information recording layer other than the farthest information recording layer from the light incidence plane among the plurality of information recording layers. The Office points out that Uno teaches GeCrN interface layers but asserts that it would have been obvious to one skilled in the art to modify Uno's media by using other interface layer materials. Regardless of whether the modification would have been obvious, the Office has made no argument that Uno's interface layer 103 has a lower thermal conductivity than interface layer 105, or that such an arrangement would have been obvious in light of Uno's disclosure. In fact, Uno teaches away from Applicants' claimed subject matter by teaching that all four interface layers 103, 105, 203, and 205 have the same thermal conductivity because they are made of the same material (GeCrN).

Despite the fact that claim 1 clearly recites an optical recording medium comprising a plurality of information recording layers, the Office's second rejection relies on two references, each of which teach only a single recording information layer. The Office's reasoning is revealed when it states that it has "interpreted the claims broadly, such that the plurality of information layers embraces a recording medium having a first recording layer and a second recording layer, including those which are adjacent and undergoing alloying with each other until the claims conflict with this interpretation."

The Office's statement apparently refers to Shuy's disclosure, in which a transparent layer and a reflecting layer are provided. When the transparent layer and the

reflecting layer are exposed to a light beam, the two layers react to form a semi-transparent reflective alloy/compound area. Applicants respectfully submit that Shuy's transparent and reflecting layers are not separate information recording layers, as Applicants have defined and used the term. Applicants claim a plurality of information recording layers with at least one information recording layer other than a farthest information recording layer from the light incidence plane among the plurality of information recording layers. If Shuy did have a plurality of information recording layers, then either its transparent layer or its reflecting layer would be analogous to Applicants' at least one information recording layer, depending on where the light incidence plane would be for Shuy's recording medium. Even setting aside the fact that neither Shuy's transparent layer nor its reflecting layer can record or reproduce data on its own, Applicants' claim 1 also recites that the information recording layer other than the one farthest from the light incidence plane includes first and second dielectric films. The Office equates Shuy's thermal manipulation layers with Applicants' dielectric films. However, this would be inconsistent with the Office's interpretation that each of the transparent and reflecting layers is a separate recording layer. To be consistent with the Office's interpretation, either the transparent layer or the reflecting layer (whichever is closer to the light incidence plane) would need to include two dielectric films. Shuy neither teaches nor suggests such an arrangement. Applicants respectfully submit that Shuy teaches a single information recording layer, which consists of, at most, two thermal manipulation layers, one reflecting layer, and one transparent layer. Nowhere does Shuy teach or suggest a plurality of information recording layers as recited in Applicants' claim 1.

Neither does Sakaue supply the missing teaching or suggestion, as Sakaue also teaches a single information recording layer consisting of, at most, two dielectric layers, two interface layers, one reflecting layer, and one recording layer.

Accordingly, for at least these reasons, claim 1 is also allowable over the combination of Shuy and Sakaue.

Claims 2-3 depend from claim 1 and, as such, are allowable as depending from an allowable base claim. These claims are also allowable for their recited features, which, in

combination with those recited in claim 1, are neither shown nor suggested by the references as cited and applied by the Office.

Conclusion

Applicants respectfully submit that all pending claims are in condition for allowance. Accordingly, Applicants request that a Notice of Allowance be issued. If the Office's next anticipated action is to be anything other than a Notice of Allowance, Applicants request that the undersigned be contacted for scheduling a telephone interview.

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

Respectfully submitted,
SEED Intellectual Property Law Group PLLC

/Rob R. Cottle/
Rob R. Cottle
Registration No. 52,772

RRC:vsj

701 Fifth Avenue, Suite 6300
Seattle, Washington 98104-7092
Phone: (206) 622-4900
Fax: (206) 682-6031

792275_1.DOC